

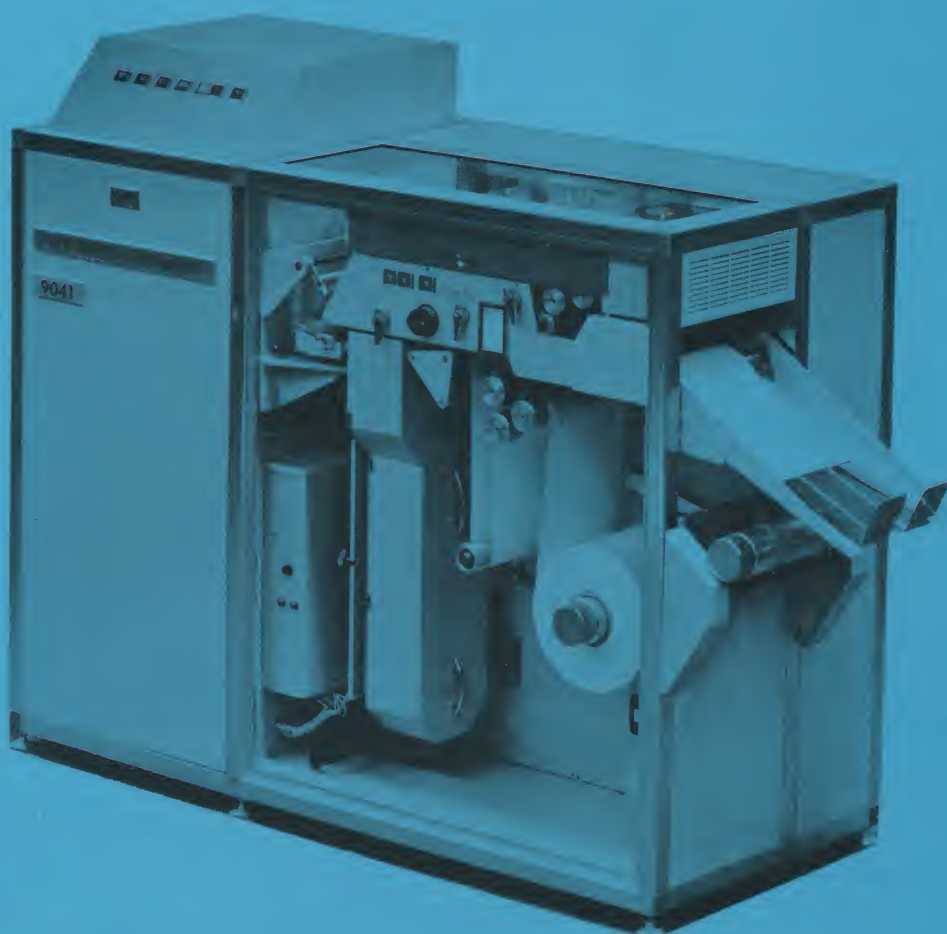
A·B·DICK



MODEL
9041

VIDEOGRAPH

A B DICK ELECTRONIC DATA PRESENTATION



MODEL 9041 PRINTER/PLOTTER

MODEL 9041 PRINTER/PLOTTER

The newest in functional presentation and printout of readable data received from computer-coded source material, the Videograph Model 9041 Printer/Plotter (Figure 1) provides high-speed electrostatic printout of alphanumeric characters and symbols, or plotted-point curves (Figure 2). By means of an electrostatic printing tube directed at a moving web of paper, character imaging, developing, and fixing are automatically performed under room lighting conditions. High contrast black-on-white permanent copy is delivered completely dry and ready for use.

A companion Printer/Plotter Control Unit may be used in conjunction with the Videograph Model 9041. This equipment provides compatibility with various computer systems and allows increased flexibility for formatting real-time data. This unit serves as a buffer between either a data acquisition system or a computer prepared tape.

Coded digital input from computer and real-time sources, received via Printer/Plotter Control Unit, is converted to readable alphanumeric output in the form of video signals, by means of a character generator. Video signal output from the character generator is then applied directly to the electrostatic printing tube for printout in readable form on Videograph paper.

Copy is delivered permanently fixed and ready for use without further processing. Videograph paper and the fixed image are of archival grade and comparable, in contrast and permanence, to black-on-white copies produced on standard typewriters. Videograph paper has a dull finish which minimizes glare and furnishes a writing surface which easily accepts notations made with lead pencil, colored pencils, and fountain or ballpoint pen.

The entire Videograph process, from printout to fixing, is completely compatible with the operating environment of conventional computers.

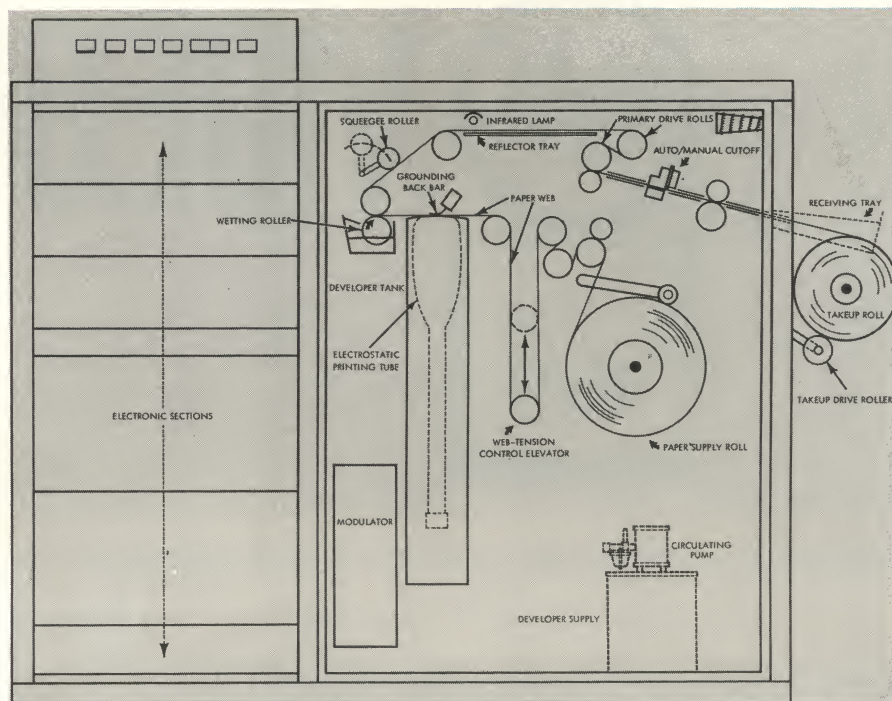
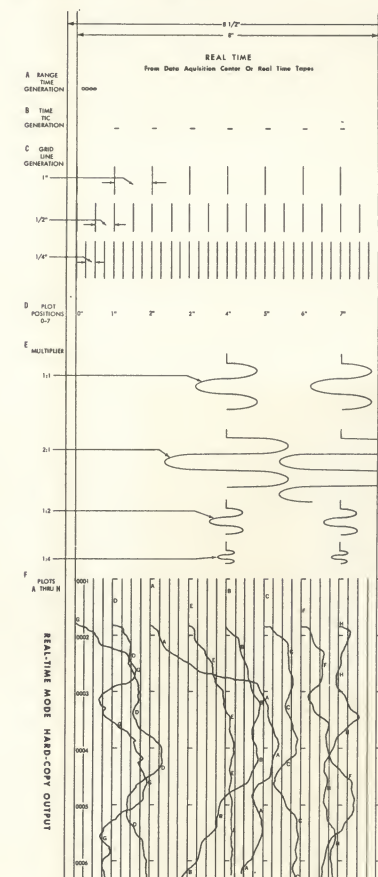


FIGURE 1.

REAL-TIME MODE HARD-COPY OUTPUT



COMPUTER-TAPE MODE HARD-COPY OUTPUT

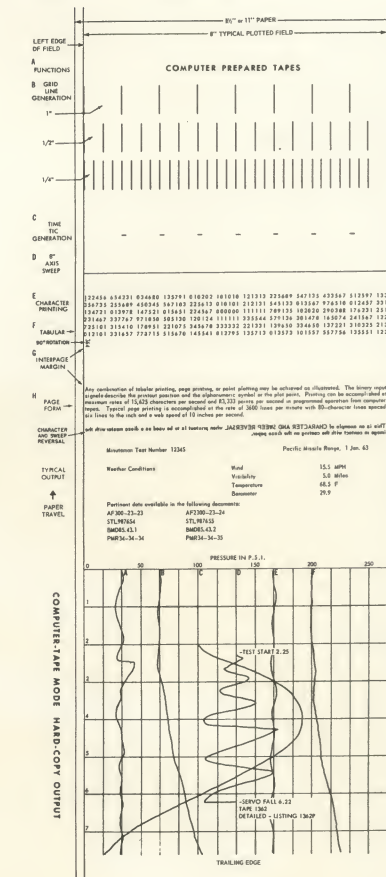


FIGURE 2.

CHARACTER GENERATOR

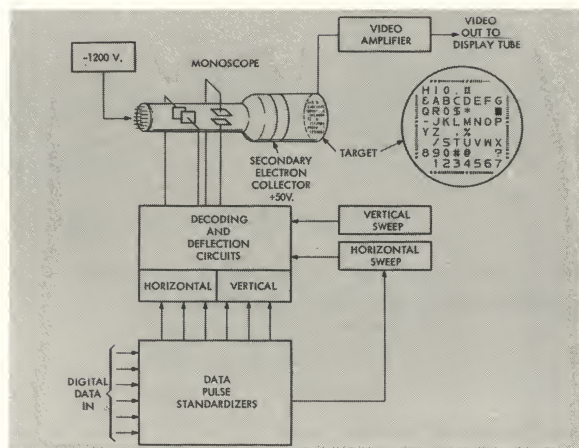


FIGURE 3.

Compatible with all modern electronic data processing systems, the Videograph Character Generator (Figure 3) is a compact electronic monoscope system that converts and translates coded digital INPUT (computer language) to readable alphanumeric characters and symbols (human language) at speeds up to 15,000 characters per second.

As a self-contained unit within the Model 9041 Printer/Plotter, the Character Generator provides readable alphanumeric OUTPUT in the form of video signals.

The heart of the Character Generator is a special monoscope-type cathode-ray tube comprising an electrostatically deflected electron gun and an aluminum target. Printed on the aluminum target are all of the desired characters or symbols in an eight-by-eight array and in any desired type face.

As the electron beam is scanned across any selected character on the target, resultant video signals are then amplified and applied instantaneously to the Printer/Plotter electrostatic printing tube. The end result is readable printout in character or plot form.

VIDEOGRAPH ELECTROSTATIC PRINTING

Developed by A. B. Dick Company, the Videograph electrostatic printing and developing technique makes possible ultra-high-speed printout from the Model 9041 Printer/Plotter at rates up to 15,000 characters per second.

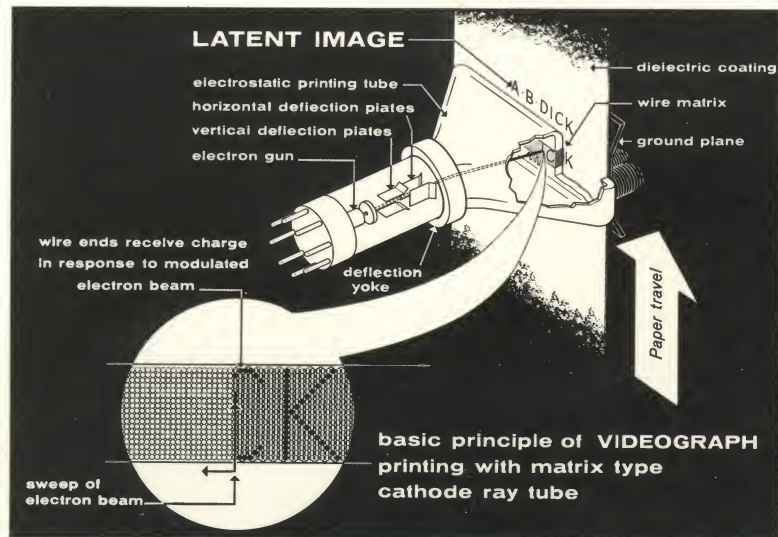
The unique feature of the equipment designed to accomplish this high-speed printing is a variation of the conventional cathode-ray tube. Instead of a fluorescent screen for image reproduction, the Videograph electrostatic printing tube (Figure 4) uses a screen or matrix of extremely fine wires extending through and sealed into the faceplate of the tube.

Video signals representing the characters and symbols to be recorded, direct the electron beam through a series of deflection plates within the tube to "write" character configurations on the wire matrix.

Current passing through the wires places an invisible electrostatic charge pattern on a moving web of paper, conforming to character images. The paper is then passed through a developer section where developing and fixing are accomplished automatically.

The Videograph printing technique is designed for maximum flexibility with systems applications. It is a less costly, highly dependable electrostatic printing method that eliminates the need for photoconductive elements, expensive papers, and a variety of peripheral factors.

FIGURE 4.



PRINTER/PLOTTER CONTROL UNIT

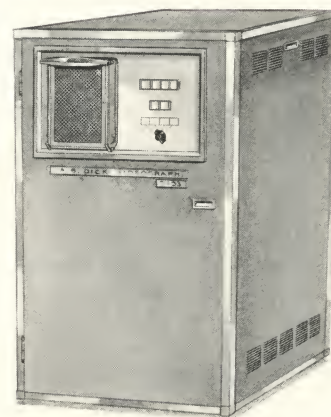


FIGURE 5.

The Printer/Plotter Control Unit (PPCU) acts as an input control unit for the Videograph Model 9041 Printer/Plotter (Figure 5). In this function, the PPCU provides the proper signals and controls necessary to command input data from either a real-time data acquisition system, or from digitally coded magnetic tape for proper sequential delivery to the Videograph Printer/Plotter.

The signals and controls emanating from the PPCU command the Printer/Plotter to print alphanumeric characters or plot precise points on a moving web of paper as well as to command the printer to cut the web at programmed intervals.

As an interconnecting system, the PPCU and the Videograph Model 9041 Printer/Plotter form a complete and extremely flexible recording system.



A·B·DICK COMPANY

5700 WEST TOUHY AVENUE • CHICAGO 48, ILLINOIS

January 8, 1965

Mr. T. Nelson, Sys. Consultant
Box 1546
Poughkeepsie, N. Y. 12603

Dear Mr. Nelson:

The increasing demand for faster production of hard-copy printout from computer-processed digital data has led to the development of the A. B. Dick Model 9041 Printer/Plotter. Utilizing a new electrostatic printing process, the Printer/Plotter produces continuous or single-sheet printed records at speeds compatible with most modern data processing equipment. Both alphanumeric characters and symbols, and plotted-point curves are produced by the Printer/Plotter.

The enclosed catalog sheets and descriptive brochures on A. B. Dick Company Model 9041 Printer/Plotter will provide specific information about this equipment.

If we can offer additional information or service, please let us know.

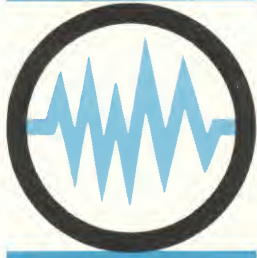
Yours truly,

Charles X. Hurst

Acting Sales & Service Manager -
Videograph

CXH:la

A·B·DICK®

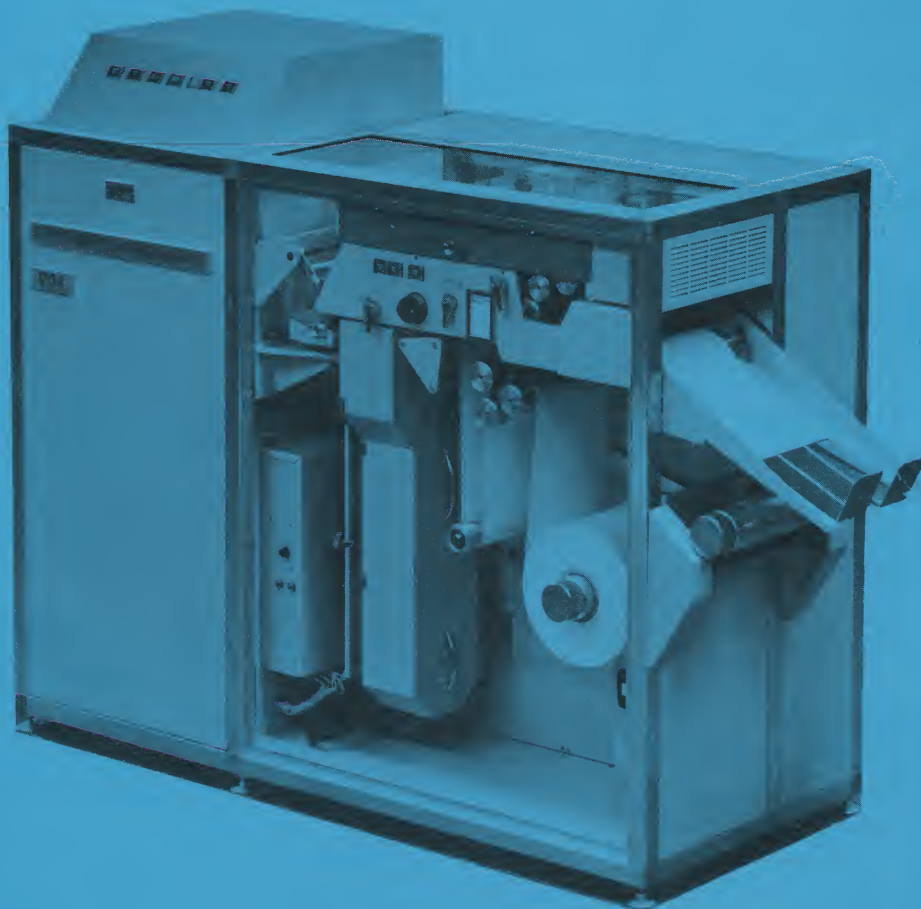


MODEL

904

VIDEOGRAPH

A B DICK ELECTRONIC DATA PRESENTATION



MODEL 904 PAGE PRINTER

MODEL 904 PAGE PRINTER

The newest in functional presentation and printout of readable data received from computer-coded source material, the Videograph Model 904 Page Printer (Figure 1) provides high-speed electrostatic printout of alphanumeric characters and symbols (Figure 2). By means of an electrostatic printing tube directed at a moving web of paper, character imaging, developing, and fixing are automatically performed under room lighting conditions. High contrast black-on-white permanent copy is delivered completely dry and ready for use.

A companion Printer Control Unit and Magnetic Tape Transport may be used in conjunction with the Videograph Model 904. This equipment provides complete flexibility and compatibility with various computer systems. The unit also serves as a buffer between the printer and a computer-prepared tape.

Coded digital input from the computer is received via the Printer Control Unit and converted to readable alphanumeric output in the form of video signals, by means of a character generator. Video signal output from the character generator is then applied directly to the electrostatic printing tube for printout in readable form on Videograph paper.

Copy is delivered permanently fixed and ready for use without further processing. Videograph paper and the fixed image are of archival grade and comparable, in contrast and permanence, to black-on-white copies produced on standard typewriters. Videograph paper has a dull finish which minimizes glare and furnishes a writing surface which easily accepts notations made with lead pencil, colored pencils, and fountain or ball-point pen.

The entire Videograph process, from printout to fixing, is completely compatible with the operating environment of conventional computers.

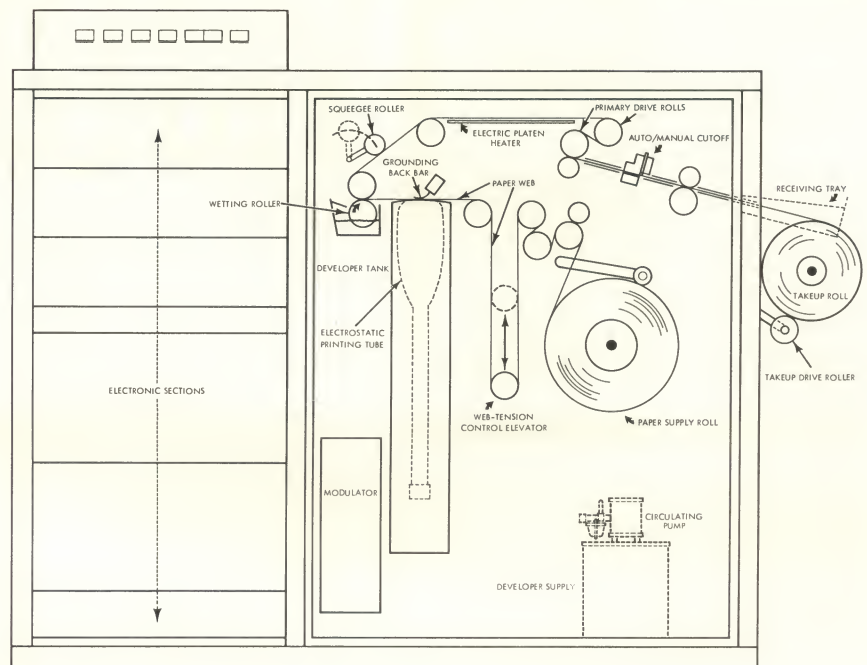


FIGURE 1

HARD COPY OUTPUT AT 7200 LINES PER MINUTE

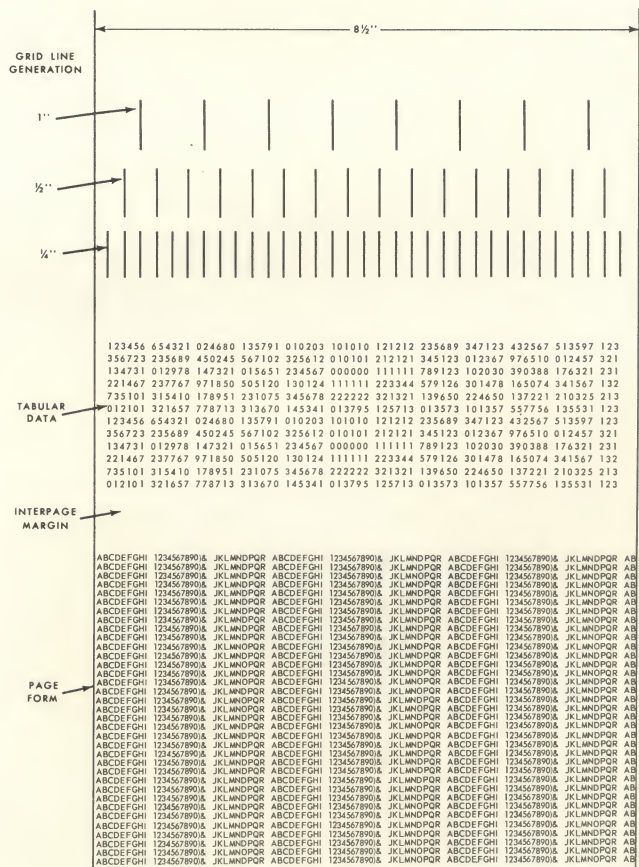


FIGURE 2

MAGNETIC TAPE TRANSPORT

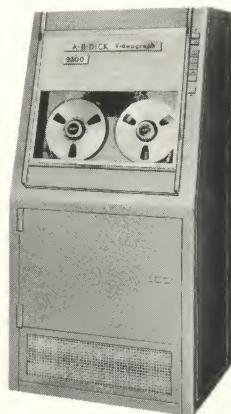


FIGURE 3

The Model 9300 Magnetic Tape Transport is a high-speed digital tape transport unit that reads computer-prepared digital data from magnetic tapes into a printer control unit.

The Model 9300 features a vacuum buffering system which offers an operating tape speed of 75 inches-per-second with either high-density 556 or 800 bits-per-inch tapes and automatic high-speed rewind. Tape loading is accomplished by push-button arm retraction control. Additional operator features include a slope-front cabinet for easier tape loading and precision tape guiding for longer tape life. "Quick Lock" NARTB reel hubs further facilitate faster, easier reel loading.

Functioning with the Videograph Page Printer and Printer Control Unit, the Model 9300 Magnetic Tape Transport generates digital information for use in the Videograph Page Printing System.

VIDEOGRAPH ELECTROSTATIC PRINTING

Developed by A. B. Dick Company, the Videograph electrostatic printing and developing technique makes possible ultra-high-speed printout from the Model 904 Page Printer at rates up to 7,200, 130 character lines per minute.

The unique feature of the equipment designed to accomplish this high-speed printing is a variation of the conventional cathode-ray tube. Instead of a fluorescent screen for image reproduction, the Videograph electrostatic printing tube (Figure 4) uses a screen or matrix of extremely fine wires extending through and sealed into the faceplate of the tube.

Video signals representing the characters and symbols to be recorded, direct the electron beam through a series of deflection plates within the tube to "write" character configurations on the wire matrix.

Current passing through the wires places an invisible electrostatic charge pattern on a moving web of paper, conforming to character images. The paper is then passed through a developer section where developing and fixing are accomplished automatically.

The Videograph printing technique is designed for maximum flexibility with systems applications. It is a less costly, highly dependable electrostatic printing method that eliminates the need for photoconductive elements, expensive papers, and a variety of peripheral factors.

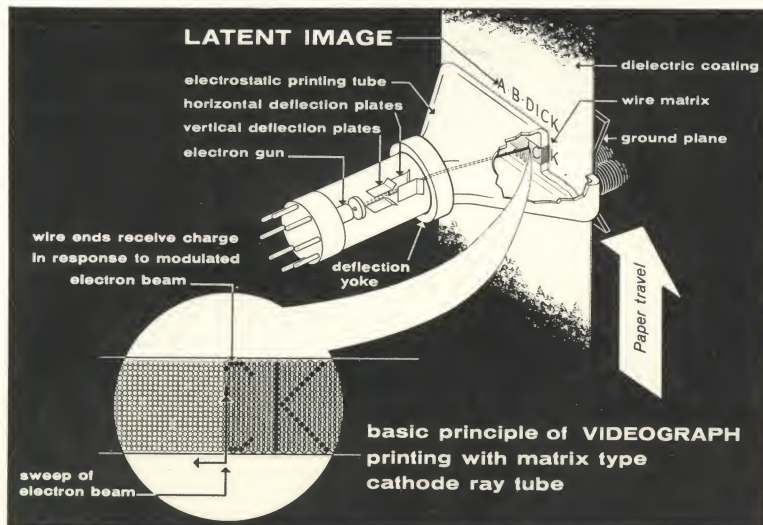


FIGURE 4

PRINTER CONTROL UNIT



FIGURE 5

The Model 9404 Control Unit (PCU) acts as an input control unit for the Videograph Model 904 Page Printer (Figure 5). In this function, the PCU provides the proper signals and controls necessary to command input data from digitally coded magnetic tape for proper sequential delivery to the Videograph Page Printer.

The signals and controls emanating from the PCU command the Page Printer to print alphanumeric characters or plot precise points on a moving web of paper as well as to command the printer to cut the web at programmed intervals.

As an interconnecting system, the PCU and the Videograph Model 904 Page Printer form a complete and extremely flexible recording system.

